Nonparametric Background Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	8/2/2013 12:02:07 PM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Coverage	95%
rent or Future K Observations	1

Aroclor

General Statistics

Total Number of Observations	61	Number of Distinct Observations	48
Number of Detects	18	Number of Non-Detects	43
Number of Distinct Detects	17	Number of Distinct Non-Detects	31
Minimum Detect	4.95	Minimum Non-Detect	1.3
Maximum Detect	16.18	Maximum Non-Detect	13
Variance Detected	10.21	Percent Non-Detects	70.49%
Mean Detected	8.466	SD Detected	3.195
Mean of Detected Logged Data	2.078	SD of Detected Logged Data	0.34

Critical Values for Background Threshold Values (BTVs)

Tolerance Factor K (For UTL)	2.013	d2max (for USL)	3.033

Nonparametric Distribution Free Background Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Kaplan Meier (KM) Background Statistics Assuming Normal Distribution

Mean	3.986	SD	3.757
95% UTL95% Coverage	11.55	95% KM UPL (t)	10.31
95% KM Chebyshev UPL	20.5	90% KM Percentile (z)	8.801
95% KM Percentile (z)	10.17	99% KM Percentile (z)	12.73
95% KM USL	15.38		

Nonparametric Uppper Limits for BTVs(no distinction made between detects and nondetects)

Order of Statistic, r	60	95% UTL with95% Coverage	13.7
Approximate f	1.579	Confidence Coefficient (CC) achieved by UTL	0.816
95% UPL	13.45	95% USL	16.18
95% KM Chebyshev UPL	20.5		

Note: The use of USL to estimate a BTV is recommended only when the data set represents a background

data set free of outliers and consists of observations collected from clean unimpacted locations.

The use of USL tends to provide a balance between false positives and false negatives provided the data

represents a background data set and when many onsite observations need to be compared with the BTV.